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SOLD  
ALONE

D3391-023  
Job Sheet 184430



Part No: D3391-023

Job Qty: 1 ea

Part Name: Mid Tube Assembly



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 10/9/18

Job Tracking No:

Due Date: 11/12/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG REV J SHEET 2 and 7 IPP A 05.10.20 New Issue KJ/EC IPP B IPP C 07.03.20 rev F dwg EC IPP D 07.03.28 re-format EC IPP E 07.10.31 ecn 1053P EC IPP Rev:F ECN 1056 07-11-13 DD verified by: EC IPP Rev:G 08-09-08 new process (ecn 08-510) DD verified by:EC IPP Rev:H 08-09-10 revH as per dwg DD verified by:EC IPP Rev: I 08-11-13 Removed steps per w/o, QC KJ verified by: ec IPP Rev:J add in seq 140 expire date &b# sikaflex DD 10.02.17 verified by:EC

Ship Via:

### Bill of Materials

### Job Routing

| Op No | Operation          | Qty   | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off       |
|-------|--------------------|-------|------------|----------|-----------|---------|-----------------------|-----------|----------------|
|       |                    |       |            |          | Setup hrs | Run Hrs | Workcenter / Supplier | Lead Time |                |
| 90    | Start up Operation | 1 Ea  |            | 11/12/18 | 0.00      | 0.00    | Start Up Skidtubes-1  |           | 39             |
| 100   | Skidtubes          | 1 pcs |            | 11/12/18 | 0.88      | 2.11    | Skidtubes-4           |           | 39 DAS         |
| 110   | QC                 | 1 pcs |            | 11/12/18 | 0.00      | 0.00    | QC5                   |           | 38             |
| 120   | HandFinish         | 1 pcs |            | 11/12/18 | 0.00      | 0.38    | HandFinish1           |           | D.R 18/11/25   |
| 130   | QC                 | 1 pcs |            | 11/12/18 | 0.00      | 0.00    | QC7-2                 |           | 60             |
| 140   | Skidtubes          | 1 pcs |            | 11/12/18 | 0.00      | 2.11    | Skidtubes-4           |           | 38             |
| 150   | QC                 | 1 pcs |            | 11/12/18 | 0.00      | 0.00    | QC5                   |           | BE             |
| 160   | Skidtubes          | 1 pcs |            | 11/12/18 | 0.00      | 2.11    | Skidtubes-4           |           | BE m66         |
| 170   | QC                 | 1 pcs |            | 11/12/18 | 0.00      | 0.00    | QC10                  |           | 38 DAS         |
| 180   | QC                 | 1 pcs |            | 11/12/18 | 0.00      | 0.00    | QC5                   |           | 38             |
| 185   | HandFinish         | 1 pcs |            | 11/12/18 | 0.00      | 0.38    | HandFinish2           |           | D.R 18/11/08   |
| 191   | SprayPaint         | 1 pcs |            | 11/12/18 | 0.00      | 0.91    | Spray Paint           |           | N/R            |
| 192   | Outsource          | 1 pcs |            | 11/12/18 |           |         | ATE003-VC             |           | DAS 11-12      |
| 193   | Packaging          | 1 pcs |            | 11/12/18 | 0.00      | 0.00    | Packaging2            |           | 15 13 2018     |
| 200   | QC                 | 1 pcs |            | 11/12/18 | 0.00      | 0.00    | QC14                  |           | 15 18-11-12    |
| 230   | HandFinish         | 1 pcs |            | 11/12/18 | 0.00      | 0.38    | HandFinish4           |           | 15 18-11-12    |
| 240   | QC                 | 1 pcs |            | 11/12/18 | 0.00      | 0.00    | QC5                   |           | NOV 14 2018 68 |
| 250   | Packaging          | 1 pcs |            | 11/12/18 | 0.00      | 0.00    | Packaging3-1          |           | 69 NOV 14 2018 |
| 260   | QC21-SA            | 1 Ea  |            | 11/12/18 | 0.00      | 0.00    | QC21                  |           | 21 NOV 15 2018 |

Part Op 100 - 1-Cut tube to finish length as per Dwg D3391 2-Drill pilot holes using DT8796 (Do not drill "B" holes) and drill only 1 holes 4-Remove .030" from Fwd indexing Ridge as per Dwg D3391 5-Remove indexing ridge on Fwd & Aft end of skidtube as per Dwg D3391 6-Deburr, scibe batch # on aft end. 7- Locate D3391-021 in D3391-023 at 9.00" (see view F-F) 8- Transfer drill one fwd saddle hole only to .188" dia, transfer drill all remaining fwd saddle holes using DT 8149 locating from previously drill .188" dia hole, using t-pins and clicos to ensure perfect allingment, open up previously tranfer drilled pilot holes in D3391-023/-021 using drill press. ON FIRST SIDE ONLY drill out 2nd and forth fwd saddles holes to 0.500" as per ON 2ND SIDE ONLY ream out 2nd and forth saddle hole to 0.499". D3391-021 BATCH: 9- Drill #30 pilot holes using wearplate Jig DT8217 Identify Ø0.375" holes with paint marker, \*\*\*DO NOT DRILL HOLES #3-19-20 FROM FWD END OF JIG\*\*\* Locating from two fwd wearplate holes in D3391-023 drill remaining 6 wearplte holes in D3391-021 using DT8937 10- Open wearplate holes of D3391-023 assembly detail section Q-Q to Ø0.375" (10 holes) as per Dwg D3391 Open wearplate holes of D3391-023 assembly detail section H-H to



DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

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| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>             Skid-tube <input type="checkbox"/><br/>             Machining <input type="checkbox"/><br/>             Thermoforming <input type="checkbox"/><br/>             Large Fab <input type="checkbox"/> </div> <div>             Cross tube <input type="checkbox"/><br/>             Small Fab <input type="checkbox"/><br/>             Finishing <input type="checkbox"/><br/>             Composite <input type="checkbox"/> </div> <div>             Water Jet <input type="checkbox"/><br/>             Prod. Eng. Coord. <input type="checkbox"/><br/>             Rec/Store/Packaging <input type="checkbox"/><br/>             Supplier <input type="checkbox"/> </div> <div>             Engineering <input type="checkbox"/><br/>             Quality <input type="checkbox"/><br/>             Other <input type="checkbox"/> </div> </div> |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                       |  |
| Date : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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                            |  | MRB (QSI042) Approval |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       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| <div style="position: absolute; left: 10px; top: 50px; font-size: 2em; opacity: 0.5;">             34<br/>53<br/>2           </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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                            |  |                       |  |
| <b>Root Cause</b><br><div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;">             Environment <input type="checkbox"/><br/>             Design <input type="checkbox"/><br/>             Doc/Data <input type="checkbox"/><br/>             Equip/Tooling <input type="checkbox"/><br/>             Handling/Pre <input type="checkbox"/><br/>             Material <input type="checkbox"/><br/>             Internal Transport <input type="checkbox"/><br/>             Tribal Knowledge <input type="checkbox"/><br/>             LOA <input type="checkbox"/><br/>             Substation <input type="checkbox"/><br/>             Past Expiry Date <input type="checkbox"/><br/>             Misidentified <input type="checkbox"/> </div> <div style="width: 50%;">             No Re-verification <input type="checkbox"/><br/>             Operator <input type="checkbox"/><br/>             Offset/Setup <input type="checkbox"/><br/>             Supplier <input type="checkbox"/><br/>             Training <input type="checkbox"/><br/>             Use for Testing <input type="checkbox"/><br/>             Poor Information <input type="checkbox"/><br/>             Rushing <input type="checkbox"/><br/>             Product Improvement <input type="checkbox"/><br/>             Process Improvement <input type="checkbox"/><br/>             Manufacturing Process <input type="checkbox"/><br/>             Past Due <input type="checkbox"/> </div> </div> |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | <b>FAULT CATEGORY</b><br><div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;">             Pressure/Forced <input type="checkbox"/><br/>             Bending <input type="checkbox"/><br/>             Centre Not Concentric <input type="checkbox"/><br/>             Cracks <input type="checkbox"/><br/>             Crimp/Kink/Ripple/Wave <input type="checkbox"/><br/>             Cuffs <input type="checkbox"/><br/>             Crushing <input type="checkbox"/><br/>             Heat Treat <input type="checkbox"/><br/>             Wave/Twist in Tube <input type="checkbox"/><br/>             Marks/Chatter <input type="checkbox"/> </div> <div style="width: 50%;">             Temperature/Cure <input type="checkbox"/><br/>             Set-up <input type="checkbox"/><br/>             BOM/Route <input type="checkbox"/><br/>             Broken/Damage/Defect <input type="checkbox"/><br/>             Inspection Incomplete/Unqualified <input type="checkbox"/><br/>             Contamination <input type="checkbox"/><br/>             Countersink <input type="checkbox"/><br/>             Cut Too Short <input type="checkbox"/><br/>             Instructions Incomplete/Unclear <input type="checkbox"/><br/>             Drill Holes <input type="checkbox"/> </div> <div style="width: 50%;">             Power Loss/Surge <input type="checkbox"/><br/>             Folio/Program <input type="checkbox"/><br/>             Grain <input type="checkbox"/><br/>             Weld <input type="checkbox"/><br/>             Wrong Stock Pulled <input type="checkbox"/><br/>             Out of Sequence <input type="checkbox"/><br/>             Off-set <input type="checkbox"/><br/>             Misabeled <input type="checkbox"/><br/>             Fit/Function <input type="checkbox"/><br/>             Misaligned/off center <input type="checkbox"/> </div> <div style="width: 50%;">             Positioned Wrong <input type="checkbox"/><br/>             Outside Dimensions <input type="checkbox"/><br/>             Over/Under tolerance <input type="checkbox"/><br/>             Part Incorrect <input type="checkbox"/><br/>             Part Lost/Missing <input type="checkbox"/><br/>             Part Moved <input type="checkbox"/><br/>             Drawing <input type="checkbox"/><br/>             Finish <input type="checkbox"/><br/>             Misread <input type="checkbox"/><br/>             Turning Sequence <input type="checkbox"/> </div> </div> |  |                       |  |
| OTHER : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          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                            |  |                       |  |



Ø0.297" (20 holes) as per Dwg D3391 Deburr and blow out all chips from inside tube, scribe  
 140 - 1-Open float bag holes as per dwg 2-C'sink float bag holes as per dwg 3- Prepare tube for welding 4-Bond web in  
 place as per Dwg D3391 & QSI 015. Adhere for 12 hours) A/R Sikaflex exp: 19/03/06 batch#: M138943  
 NOTE: ENSURE WEB IS INSERTED IN AFT END OF TUBE  
 160 - 1-Weld crossbolt spacer as per dwg D3391 & QSI 004 2-grind weld flush A/R 138673  
 185 - Re-alodine  
 191 - PRIME AS PER DWG AND QSI005 4.2.1.3.3 PRIMER BATCH: \_\_\_\_\_ PAINT AS PER DWG AND  
 QSI005 4.2.2.4 PAINT: \_\_\_\_\_  
 230 - 1-Install Inserts as per Dwg

#### Job BOM

| Part / Item   | Component Name     | Quantity      | Operation             | Container |
|---------------|--------------------|---------------|-----------------------|-----------|
| D2500-1-100   | Skidtube Extrusion | 1 Ea (1 ea)   | 90-Start up Operation | 163253    |
| D3389-1       | Web                | 1 Ea (1 ea)   | 140-Skidtubes         | 5117267   |
| D3681-1       | Spacer             | 5 Ea (5 ea)   | 160-Skidtubes         | 5103210   |
| ALS4-1032-130 | Rivnut             | 20 Ea (20 ea) | 230-HandFinish        | 5007279   |
| D3591-1       | Bushing            | 2 Ea (2 ea)   | 230-HandFinish        | 5122431   |

#### Job Allocations

| Operation             | Component Part | Required | Inventory | Allocated |
|-----------------------|----------------|----------|-----------|-----------|
| 90-Start up Operation | D2500-1-100    | 1        | 32        | 0         |
| 140-Skidtubes         | D3389-1        | 1        | 11        | 0         |
| 160-Skidtubes         | D3681-1        | 5        | 257       | 0         |
| 230-HandFinish        | ALS4-1032-130  | 20       | 12,131    | 0         |
|                       | D3591-1        | 2        | 11        | 0         |

#### Part Specifications

Specifications could not be found.

**DART**  
AEROSPACE

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19/18 1:16 PM Dart.lajeunesse.marie

Container No: S119960



Part: D3391-023

Job No. 184430

Serial No/Batch: S119960

Revision: J

Inspector:

Exp Date

Instructions: Various STC's

Date: 10/20/18



DQA: \_\_\_\_\_ Date: \_\_\_\_\_



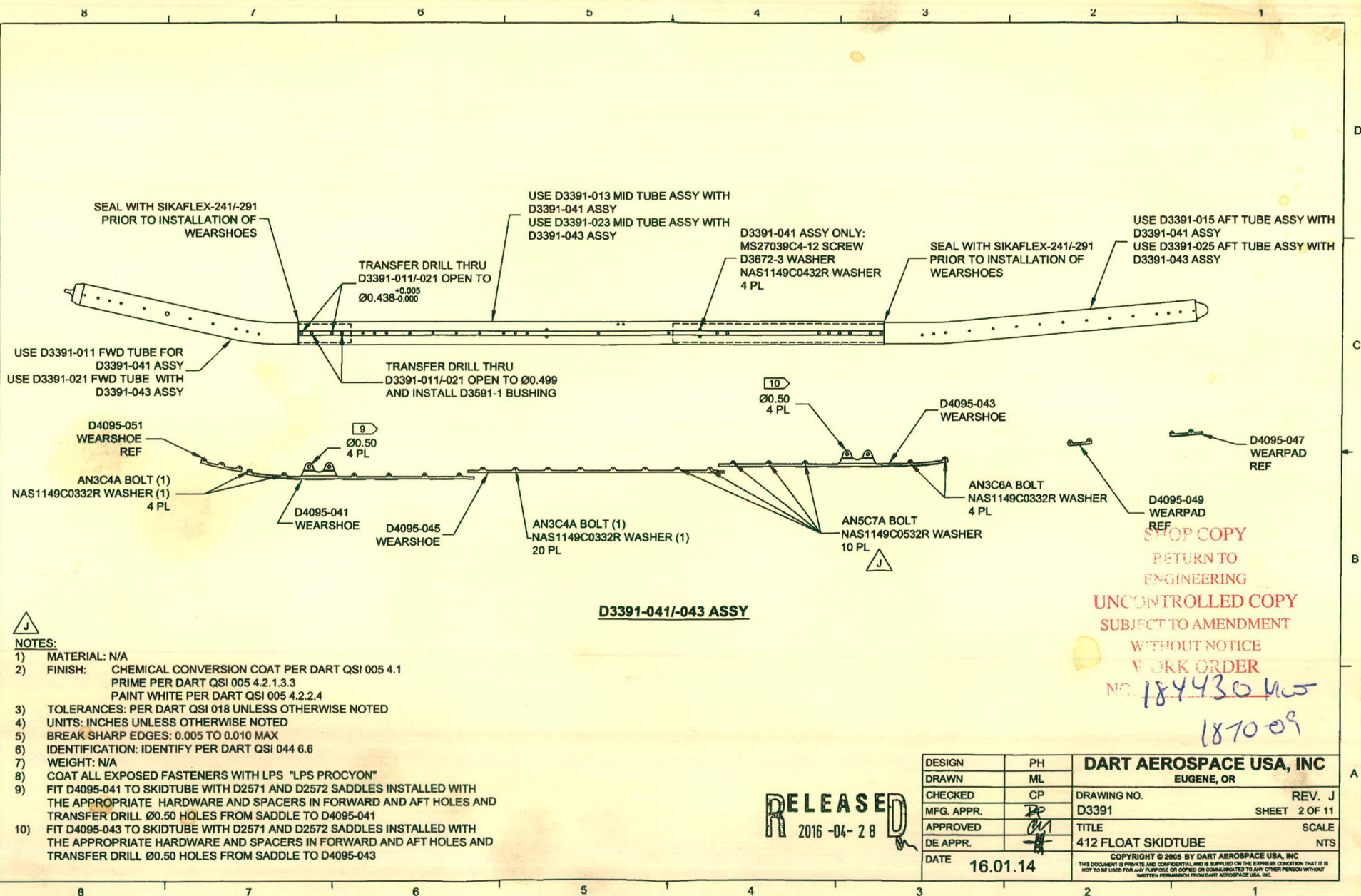
## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

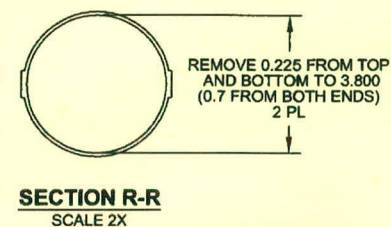
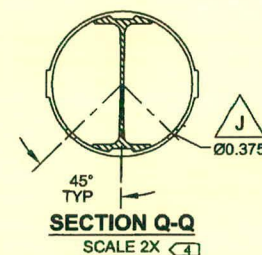
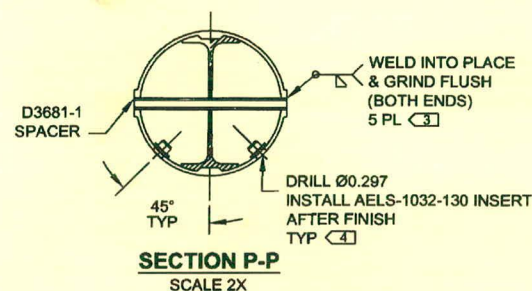
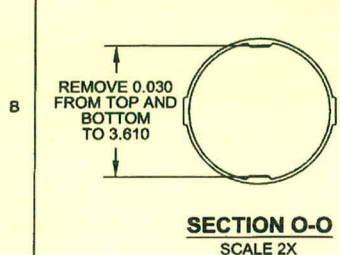
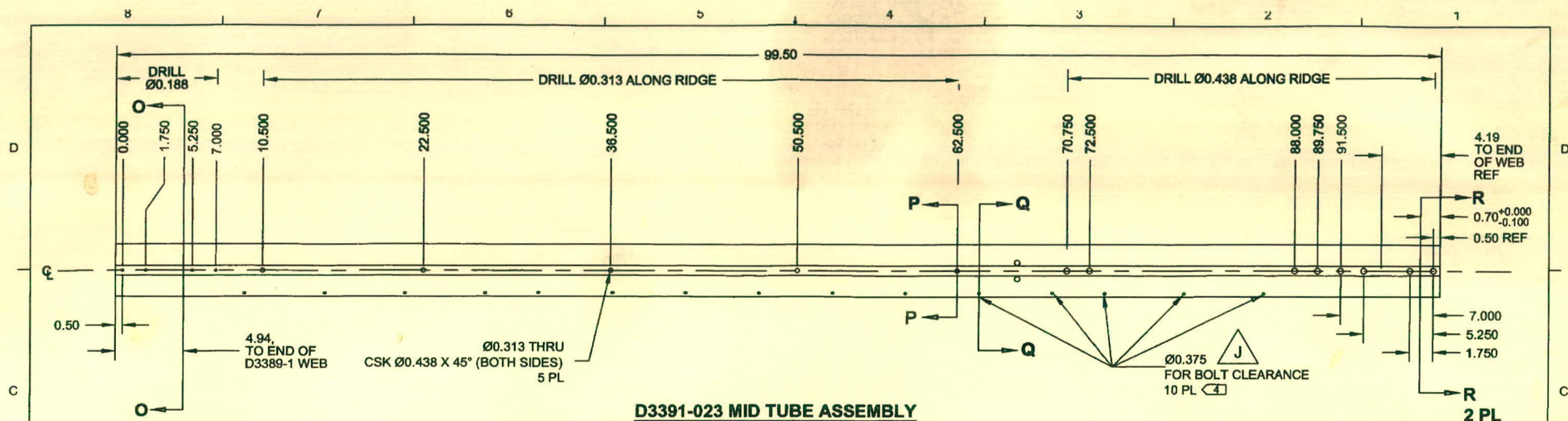
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|--------------------------------------------------------------|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--|-----------------------|-------------------------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ |                                                | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> |                                                            | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |                                               |  |                       |                                                 |  |
| Date :                                                       |                                                | Step #:                                                                                                                                                                            |                                                            | QTY Effective :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  | MRB (QS1042) Approval |                                                 |  |
| Description Work Order Deviation                             |                                                |                                                                                                                                                                                    |                                                            | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                               |  |                       | Completed By                                    |  |
|                                                              |                                                |                                                                                                                                                                                    |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  |                       | Lead hand / Supervisor<br>Approval Verification |  |
|                                                              |                                                |                                                                                                                                                                                    |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  |                       |                                                 |  |
|                                                              |                                                |                                                                                                                                                                                    |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  |                       | QC / QA Coordinator<br>Approval                 |  |
| <b>Root Cause</b>                                            |                                                | <b>FAULT CATEGORY</b>                                                                                                                                                              |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  |                       |                                                 |  |
| Environment <input type="checkbox"/>                         | No Re-verification <input type="checkbox"/>    | Pressure/Forced <input type="checkbox"/>                                                                                                                                           | Temperature/Cure <input type="checkbox"/>                  | Power Loss/Surge <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Positioned Wrong <input type="checkbox"/>     |  |                       |                                                 |  |
| Design <input type="checkbox"/>                              | Operator <input type="checkbox"/>              | Bending <input type="checkbox"/>                                                                                                                                                   | Set-up <input type="checkbox"/>                            | Folio/Program <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Outside Dimensions <input type="checkbox"/>   |  |                       |                                                 |  |
| Doc/Data <input type="checkbox"/>                            | Offset/Setup <input type="checkbox"/>          | Centre Not Concentric <input type="checkbox"/>                                                                                                                                     | BOM/Route <input type="checkbox"/>                         | Grain <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Over/Under tolerance <input type="checkbox"/> |  |                       |                                                 |  |
| Equip/Tooling <input type="checkbox"/>                       | Supplier <input type="checkbox"/>              | Cracks <input type="checkbox"/>                                                                                                                                                    | Broken/Damage/Defect <input type="checkbox"/>              | Weld <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Part Incorrect <input type="checkbox"/>       |  |                       |                                                 |  |
| Handling/Pre <input type="checkbox"/>                        | Training <input type="checkbox"/>              | Crimp/Kink/Ripple/Wave <input type="checkbox"/>                                                                                                                                    | Inspection Incomplete/Unqualified <input type="checkbox"/> | Wrong Stock Pulled <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Part Lost/Missing <input type="checkbox"/>    |  |                       |                                                 |  |
| Material <input type="checkbox"/>                            | Use for Testing <input type="checkbox"/>       | Cuffs <input type="checkbox"/>                                                                                                                                                     | Contamination <input type="checkbox"/>                     | Out of Sequence <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Part Moved <input type="checkbox"/>           |  |                       |                                                 |  |
| Internal Transport <input type="checkbox"/>                  | Poor Information <input type="checkbox"/>      | Crushing <input type="checkbox"/>                                                                                                                                                  | Countersink <input type="checkbox"/>                       | Off-set <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Drawing <input type="checkbox"/>              |  |                       |                                                 |  |
| Tribal Knowledge <input type="checkbox"/>                    | Rushing <input type="checkbox"/>               | Heat Treat <input type="checkbox"/>                                                                                                                                                | Cut Too Short <input type="checkbox"/>                     | Mislabeled <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Finish <input type="checkbox"/>               |  |                       |                                                 |  |
| LOA <input type="checkbox"/>                                 | Product Improvement <input type="checkbox"/>   | Wave/Twist in Tube <input type="checkbox"/>                                                                                                                                        | Instructions Incomplete/Unclear <input type="checkbox"/>   | Fit/Function <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Misread <input type="checkbox"/>              |  |                       |                                                 |  |
| Substation <input type="checkbox"/>                          | Process Improvement <input type="checkbox"/>   | Marks/Chatter <input type="checkbox"/>                                                                                                                                             | Drill Holes <input type="checkbox"/>                       | Misaligned/off center <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Turning Sequence <input type="checkbox"/>     |  |                       |                                                 |  |
| Past Expiry Date <input type="checkbox"/>                    | Manufacturing Process <input type="checkbox"/> | OTHER : _____                                                                                                                                                                      |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  |                       |                                                 |  |
| Misidentified <input type="checkbox"/>                       | Past Due <input type="checkbox"/>              |                                                                                                                                                                                    |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  |                       |                                                 |  |











# **D3391-023 MID TUBE ASSEMBLY PARTS LIST**

| QTY<br>-023 | PART NUMBER   | DESCRIPTION       |
|-------------|---------------|-------------------|
| X           | D3391-023     | MID TUBE ASSEMBLY |
| 1           | D2500-1-100   | EXTRUSION         |
| 1           | D3389-1       | WEB               |
| 5           | D3681-1       | SPACER            |
| 20          | AELS-1032-130 | INSERT            |



## **D3391-023 MID TUBE ASSEMBLY**

- 1) MATERIAL: MAKE FROM D2500-1-100
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241-291 PER QSI 015
- 3) WELDING: PER DART QSI 004
- 4) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 AND Ø0.375 HOLES FOR WEARSHOE INSERTS AND NUTPLATES, CBORE AS NOTED AND INSTALL INSERT/NUTPLATES EXCEPT WHERE INDICATED.

|                                                                                                                                                                                                                                     |           |                                             |               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------------------------------|---------------|
| DESIGN                                                                                                                                                                                                                              | PH        | <b>DART AEROSPACE USA, INC</b>              |               |
| DRAWN                                                                                                                                                                                                                               | ML        | EUGENE, OR                                  |               |
| CHECKED                                                                                                                                                                                                                             | CP        | DRAWING NO.                                 | REV. J        |
| MFG. APPR.                                                                                                                                                                                                                          | <i>CP</i> | D3391                                       | SHEET 7 OF 11 |
| APPROVED                                                                                                                                                                                                                            | <i>CP</i> | TITLE                                       | SCALE         |
| DE APPR.                                                                                                                                                                                                                            | <i>CP</i> | 412 FLOAT SKIDTUBE                          | NTS           |
| DATE                                                                                                                                                                                                                                | 16.01.14  | COPYRIGHT © 2005 BY DART AEROSPACE USA, INC |               |
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**RELEASED**  
2016-04-28







Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# **PURCHASE ORDER** **PO041685**

**Supplier:** ATE003-VC  
Atelier Debosselage  
358 Principale  
Calumet  
QC  
J0V 1B0 Canada  
Phone: 819 242 5633

**PO No:** PO041685  
**PO Date:** 11/12/18  
**Due Date:** 11/16/18  
**Purchase Order**  
**Revision:**  
**Revision Date:**  
**Ship-To Contact:** Phone:

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**Via:** Ground  
**Pymt Terms:** Net 30  
**Freight Terms:**  
**Special Comments:**

## Items

| Line Item           | Job    | Part      | Description                                                                                                    | Status | Account | Due Date    | Order Quantity | Received Quantity | Balance | Unit Price (CAD) | Extended Price  |
|---------------------|--------|-----------|----------------------------------------------------------------------------------------------------------------|--------|---------|-------------|----------------|-------------------|---------|------------------|-----------------|
| 1                   | 183590 | D3391-025 | Aft Tube Assembly<br>: Various STC's<br><br>PRIME AS PER DWG AND<br>QSI005 4.2.1.3.3                           | Firmed | -       | 11/16/18    | 1 pcs          | 0 pcs             | 1 pcs   | \$125.00/pcs     | \$125.00        |
|                     |        |           |                                                                                                                |        | 1X      | NOV 13 2018 |                |                   |         |                  |                 |
|                     | 183586 |           | 1X NOV 13 2018                                                                                                 | Firmed | -       | 11/16/18    | 1 pcs          | 0 pcs             | 1 pcs   | \$125.00/pcs     | \$125.00        |
|                     | 183585 |           | 1X NOV 13 2018                                                                                                 | Firmed | -       | 11/16/18    | 1 pcs          | 0 pcs             | 1 pcs   | \$125.00/pcs     | \$125.00        |
|                     | 183588 |           | 1X NOV 13 2018                                                                                                 | Firmed | -       | 11/16/18    | 1 pcs          | 0 pcs             | 1 pcs   | \$125.00/pcs     | \$125.00        |
| <b>Sub Total:</b>   |        |           |                                                                                                                |        |         |             | 4              | 0                 | 4       |                  | <b>\$500.00</b> |
| 2                   | 184430 | D3391-023 | Mid Tube Assembly<br>: Various STC's<br><br>PRIME AS PER DWG AND<br>QSI005 4.2.1.3.3<br>PRIMER<br>BATCH: _____ | Firmed | -       | 11/16/18    | 1 pcs          | 0 pcs             | 1 pcs   | \$125.00/pcs     | \$125.00        |
|                     |        |           |                                                                                                                |        | 1X      | NOV 13 2018 |                |                   |         |                  |                 |
| <b>Grand Total:</b> |        |           |                                                                                                                |        |         |             |                |                   |         |                  | <b>\$625.00</b> |









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Hawkesbury, ON  
K6A 1K7  
Canada

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## PURCHASE ORDER PO041685

### Order Notes

#### Procurement Quality Clauses

A005 right of entry  
A012 chemical and physical test report  
A016 personnel qualification  
A017 raw material identification (as applicable)

A022 Apical Processing  
A024 process certifications  
A026 certification of material conformance

A041 quality management system  
A042 dart notification by supplier  
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Plex 11/12/18 10:32 AM dart.tsimiklis.chrisoula



